

RF EXPOSURE REPORT

OF

Applicant: GOOGLE LLC
1600 Amphitheatre Parkway Mountain View, CA 94043

Product Name: Wireless Streaming Device

Brand Name: Google

Model No.: G3AL9

Model Difference: N/A

Report Number: ER/2020/80017

FCC ID: A4RG3AL9

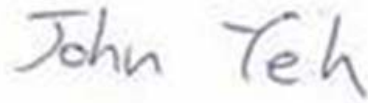
FCC Rule Part Part 2.1091

Issue Date: Feb. 26, 2021

We hereby certify that:

The above equipment was verified by SGS Taiwan Ltd. The evaluation in this report is in compliance with the above rule(s).

The results of this report relate only to the sample identified in this report.



Approved By: _____

Yeh John / Asst. Manager

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
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Revision History

Report Number	Revision	Description	Issue Date	Remark
ER/2020/80017	Rev.00	Original.	Feb. 26, 2021	Revised By: Tiffany Kao

Note:

1、Disclaimer

Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.

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1 DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)

1.1 General:

Product Name:	Wireless Streaming Device
Brand Name:	Google
Model No.:	G3AL9
Model Difference:	N/A
Hardware Version:	N/A
Software Version:	N/A
Power Supply:	3.65Vdc from Rechargeable Li-polymer Battery or 5V from AC/DC Adapter

1.2 Antenna Information:

1.2.1 BT / WLAN 2.4GHz

Antenna Type	Supplier	Antenna Part No.	Freq. (MHz)	Peak Antenna Gain (dBi)
PIFA	N/A	N/A	2.4GHz	2.4

1.2.2 WLAN 5GHz

Antenna Type	Supplier	Antenna Part No.	Main / Aux	Operating Frequency (MHz)	Peak Antenna Gain (dBi)
PIFA	N/A	N/A	Main	5150~5250	5.9
				5250~5350	5.9
				5470~5725	6.5
				5725~5850	6.6

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2 FCC MAXIMUM PERMISSIBLE EXPOSURE (MPE)

2.1 FCC Standard Applicable

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

This is a Mobile device, the MPE is required.

According to §1.1310 and §2.1091 RF exposure is calculated.

Limits for Maximum Permissive Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-15000	/	/	1.0	30

f = frequency in MHz

* = Plane-wave equipment power density

Prediction of MPE limit at a given distance

$$S = PG / 4\pi R^2$$

Where: S = Power density

P = Power input to antenna

G = Power gain of the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation of the antenna

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2.2 Power Density Calculation (Worst Case)

FCC Standalone MPE

Operation Mode	Evaluation Frequency (MHz)	Operation Distance (cm)	Max. tune-up Power With Tolerance (dBm)	Antenna Gain (dBi)	Max. output Power EIRP (mW)	Power Density (PD) (mW/cm ²)	Limit (mW/cm ²)	Pass / Fail	Power Density / Limit
BLE	2402.00	20	11.00	2.40	21.88	0.004	1.000	Pass	0.004
WLAN 2.4G	2437.00	20	19.50	2.40	154.88	0.031	1.000	Pass	0.031
WLAN 5G	5745.00	20	15.50	6.6	162.18	0.032	1.000	Pass	0.032

~ End of Report ~

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